TEXTRON

OUTFRONT FLAIL MOWER

SETUP, PARTS & MAINTENANCE MANUAL
OUTFRONT FLAIL MOWER

MODELS:

956021 - FLAIL 60 IN, 700 FL HYD

956025 - FLAIL 60 IN, 700 FL/TURFCAT HYD

WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.

TEXTRON
TURF CARE AND SPECIALTY PRODUCTS

2722327 REV00

CALIFORNIA
Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

Californie Proposition 65
Avertissement

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

California Advertencia
de la Proposicion 65

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

AVERTISSEMENT

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

ADVERTENCIA

El estado de California hace saber que los gases de escape de este producto contienen productos quÍmicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

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IMPORTANT MESSAGE

Thank you for purchasing this Textron product. You have purchased a world class mowing product, one of the best designed and built anywhere.

This machine comes with an Operation and Safety Manual and a Parts and Service Manual. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand these manuals. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Textron product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manuals thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See an authorized dealer for any service or parts needed. Textron service ensures that you continue to receive the best results possible from Textron's products. You can trust Textron replacement parts because they are manufactured with the same high precision and quality as the original parts.

Textron designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manuals, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Textron Turf Care And Specialty Products
One Bob Cat Lane
Johnson Creek, WI 53038-0469

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NOTICE !!!

Unauthorized modifications may present **extreme** safety hazards to operators and bystanders and could also result in product damage.

Textron Turf Care And Specialty Products strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Textron Turf Care And Specialty Products Engineering Department. Any Textron Turf Care And Specialty Products product that is altered, modified or changed in any manner not specifically authorized after original manufacture–including the addition of "after-market" accessories or component parts not specifically approved by Textron Turf Care And Specialty Products–will result in the Textron Turf Care And Specialty Products Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Textron Turf Care And Specialty Products will be considered the responsibility of the individual(s) or company designing and/or making such changes. Textron Turf Care And Specialty Products will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.

This symbol means:
ATTENTION!
BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Textron Turf Care And Specialty Products machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

⚠ DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

⚠ WARNING

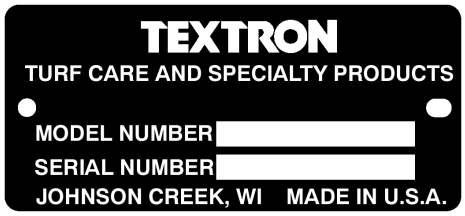
WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

⚠ CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage

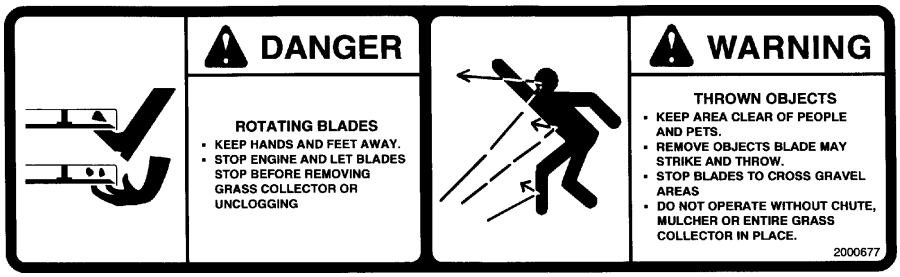


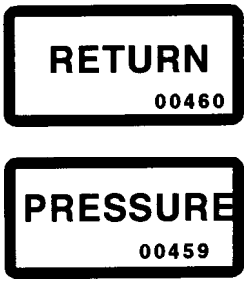
SERIAL TAG

MODEL NUMBER: This number appears on sales literature, technical manuals and price lists.

SERIAL NUMBER: This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

1.1 DECALS


DANGER
ROTATING BLADES
• KEEP HANDS AND FEET AWAY.
• STOP ENGINE AND LET BLADES STOP BEFORE REMOVING GRASS COLLECTOR OR UNCLOGGING
WARNING
THROWN OBJECTS
• KEEP AREA CLEAR OF PEOPLE AND PETS.
• REMOVE OBJECTS BLADE MAY STRIKE AND THROW.
• STOP BLADES TO CROSS GRAVEL AREAS
• DO NOT OPERATE WITHOUT CHUTE, MULCHER OR ENTIRE GRASS COLLECTOR IN PLACE.
2000677



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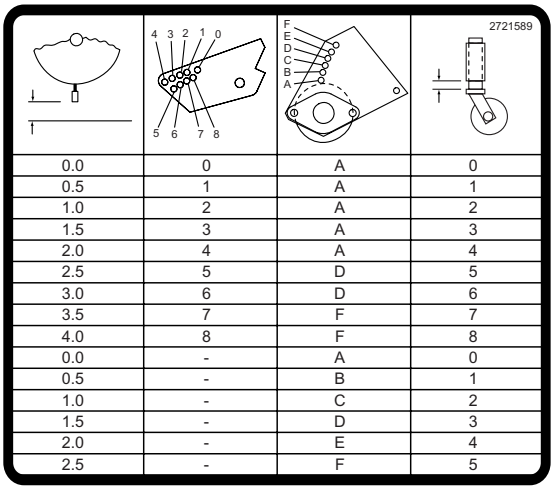


0.0	0	A	0
0.5	1	A	1
1.0	2	A	2
1.5	3	A	3
2.0	4	A	4
2.5	5	D	5
3.0	6	D	6
3.5	7	F	7
4.0	8	F	8
0.0	-	A	0
0.5	-	B	1
1.0	-	C	2
1.5	-	D	3
2.0	-	E	4
2.5	-	F	5

2.0 IMPORTANT INFORMATION

The set-up and testing of the unit should always be performed by a trained technician, familiar with the operation of this equipment.

Read each instruction completely and make sure you understand it before proceeding with the assembly. Stay alert for potential hazards and obey all safety precautions.

The RIGHT and LEFT, FRONT and REAR of the cutting unit are referenced from the operator's seat on the tractor.

⚠CAUTION *Do not attempt to drive the tractor unless you are familiar with this type of equipment and know how to operate all controls correctly.*

Flail Mowers

Flail mowers are shipped complete with cutting blades assembled. Hydraulic hoses, casters and pusharms are shipped loose. Follow instructions in Section 3.0 when installing cutting unit to tractor. Refer to Section 4.2 to adjust cutting height.

Hydraulic Motors

Before disconnecting any hydraulic lines thoroughly clean fittings and other components. Be prepared to cap or plug open hoses and ports to prevent contamination to the hydraulic system.

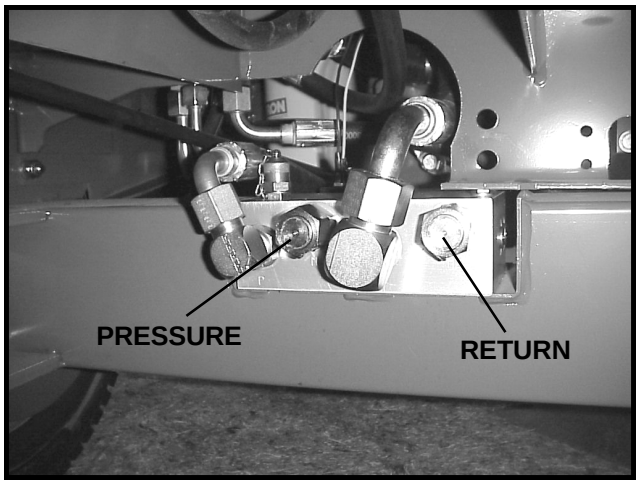
3.0 INSTALLING FLAIL MOWER

Before installing or disconnecting any hydraulic lines thoroughly clean fittings and other components. Be prepared to cap or plug open hoses and ports to prevent contamination from entering the hydraulic system.

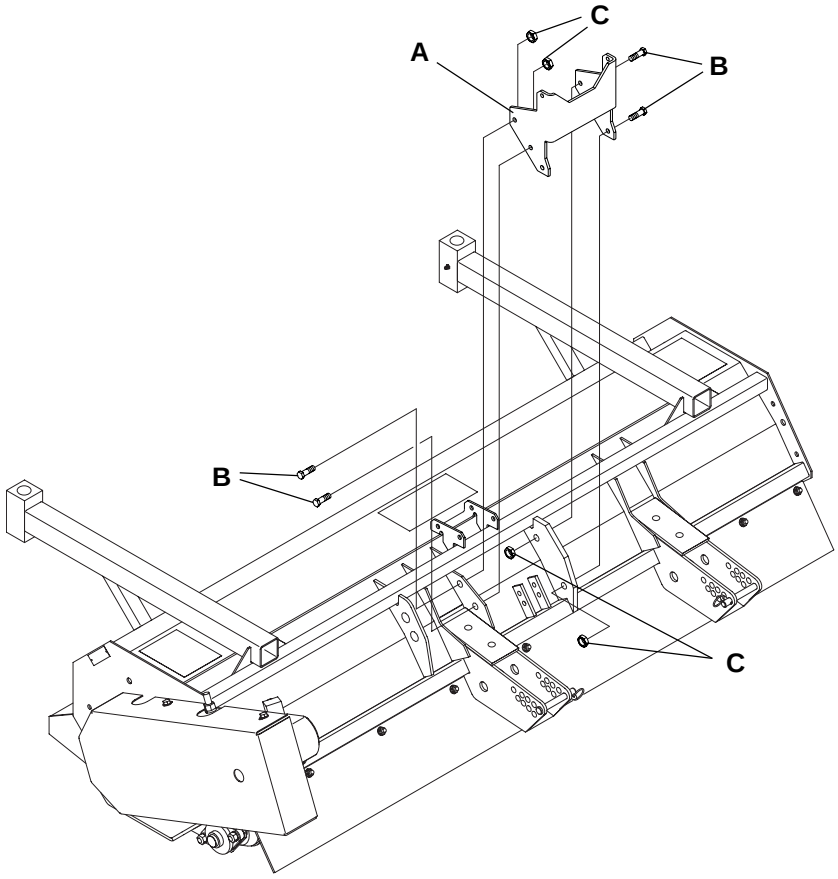
1. Attach hoses supplied with cutting unit to tractor implement valve as shown.

   • Connect longer hose to the pressure side of the implement valve.

   • Connect shorter hose to the return side of the implement valve.



2. Install the lift support plate **(A)** using (4) 3/8"-18 X 1" bolts **(B)** and (4) 3/8"-18 nuts **(C)** as shown.

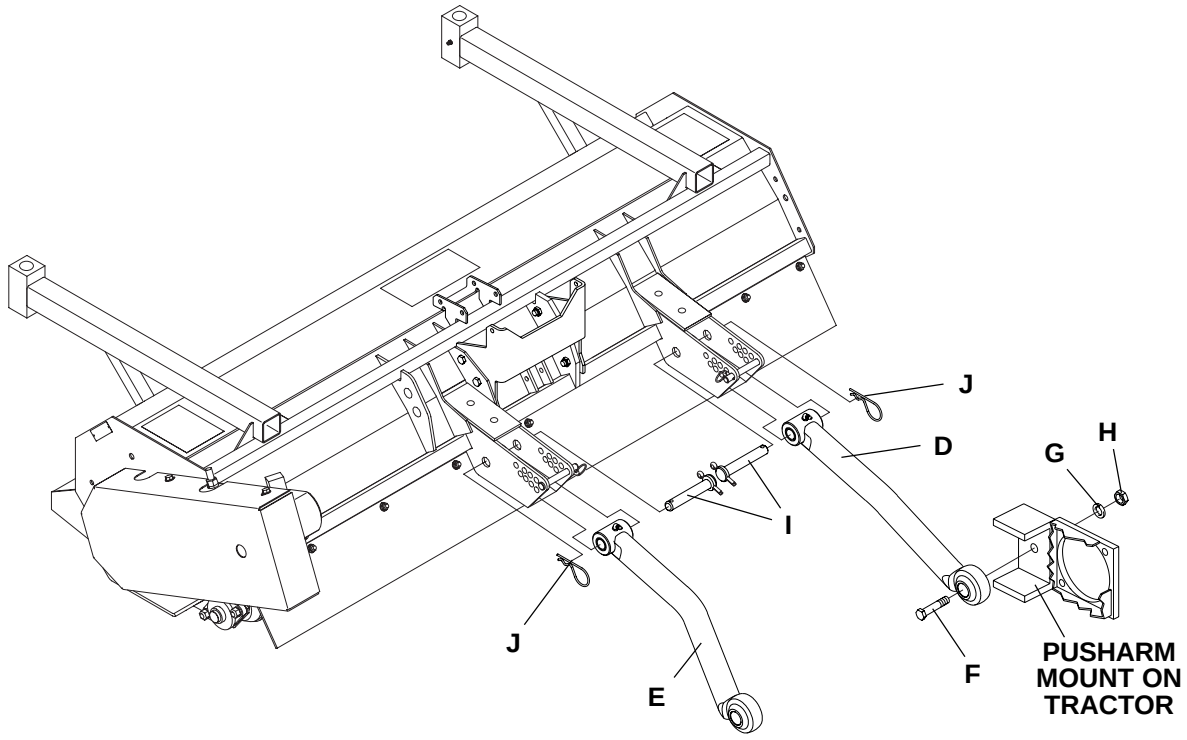


3. Install right hand pusharm **(D)** and left hand pusharm **(E)** on tractor in positions shown using (2) 5/8"-18 X 3" bolts **(F)**, (2) 5/8" lockwashers **(G)** and (2) 5/8"-18 nuts **(H)**.

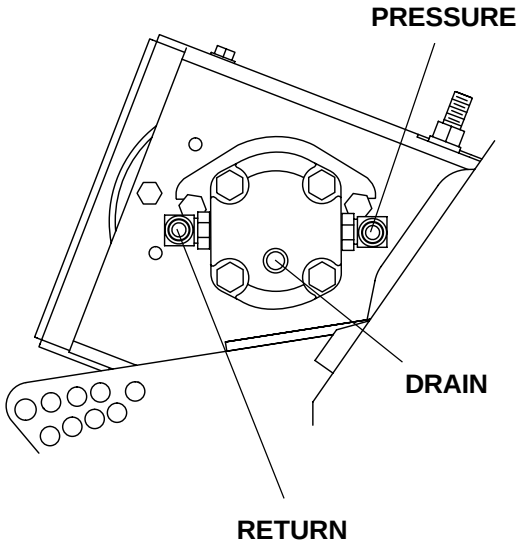
   NOTE: Left hand pusharm **(E)** has larger offset.

4. Roll cutting unit towards tractor lining up pusharm brackets with pusharms on tractor. Attach using cotter pins to (2) pivot pins **(I)** then insert pins and secure with (2) quick pins **(J)** with the quick pins on the outside as shown.

   NOTE: If necessary, raise the front of the cutting unit onto a block to allow pin holes to line up. It may be necessary to tap one pivot pin **(F)** into hole when installing arms.

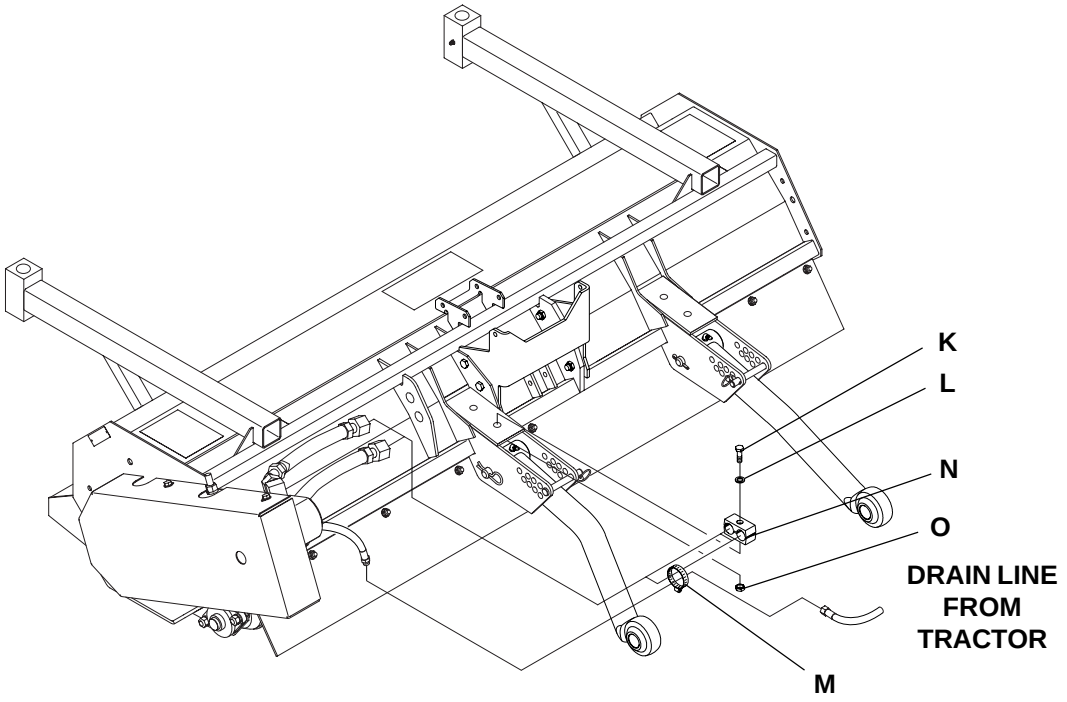


5. Connect hoses from tractor to the motor as shown. Refer to Step one photo to ensure the pressure hose gets connected to the pressure side of the motor and that the return hose gets connected to the return side of the motor.
6. Connect drain line hose shipped loose with the cutting unit to the drain fitting on the motor and connect other end of drain hose to the drain line on the tractor.

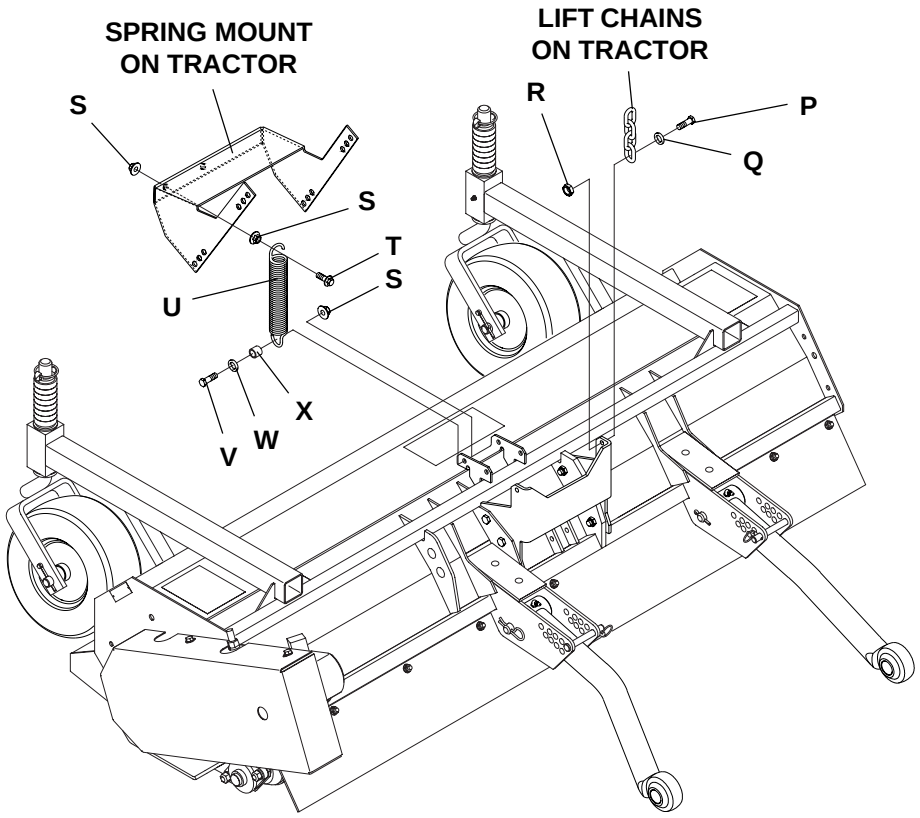


7. Route larger 5/8" pressure and return hoses through clamp **(N)** and secure clamps to cutting unit using (1) 5/16"-18 X 2-1/2" bolt **(K)**, (1) 5/16" lockwasher **(L)** and (1) 5/16"-18 nut **(H)** as shown. Route the smaller 3/8" drain line hose next to the return line and secure return hose and drain line using hose clamp and rubber liner **(M)** as shown. Rotate the clamp tightening mechanism to the bottom of the two hoses before securing. Maintain the drain line hose as low as possible.

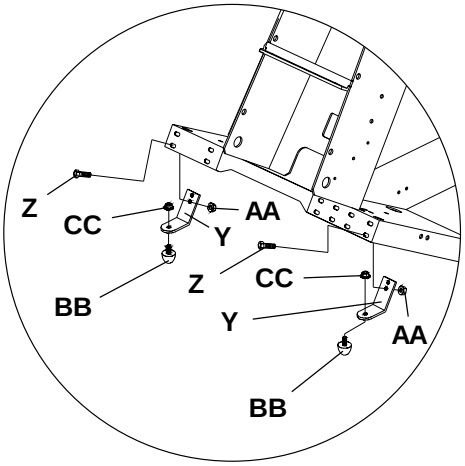
   NOTE: Drain line connection on the tractor must be loosened to allow hose to be rotated for best hose routing. Retighten hose fitting on the tractor after connecting drain line hose from cutting unit.



8. Start tractor and lower deck lift to expose deck lift chains. Attach deck lift chains to cutting unit using (2) 5/16"-18 X 1-1/4" bolts **(P)**, (2) 5/16" washers **(Q)** and (2) 5/16"-18 nuts **(R)** as shown.
9. Connect both cutting unit springs **(U)** to spring mount bracket on tractor using (2) 3/8"-16 X 1-1/2" bolts **(T)** and (4) 3/8"-16 locking flange nuts **(S)** as shown.
10. Start tractor and raise the cutting unit into the transport position. Connect the bottom of the cutting unit springs **(U)** using (2) 3/8"-16 X 1" bolts **(V)**, (2) 3/8" washers **(W)**, (2) spacers **(X)** and (2) 3/8"-16 locking flange nuts **(S)** as shown. Check for clearance of drain hose to tractor brake latch. Reposition hose or clamp if necessary.
11. Install casters using spacers and quick pins.



12. Lower cutting unit by lowering the deck lift. Attach deck stops **(Y)** using (4) 5/16"-18 X 1" bolt **(Z)** and (4) 5/16"-18 nuts as shown.
13. Attach rubber bumpers **(BB)** using (2) 5/16"-18 locking flange nuts **(CC)** as shown.
14. After installation run mower and check for proper rotation. Correct rotation is counterclockwise when viewed from the "drive side". If rotation is wrong reverse hydraulic lines at deck motor.
15. Set cutting height, see Section 4.2



4.0 GENERAL

⚠WARNING *To prevent serious injury, always disengage all drives, lower implement to the ground, engage parking brake, stop engine and remove the ignition key before you adjust, clean or repair this equipment.*

1. Adjustments and maintenance should always be performed by a qualified technician. If proper adjustment cannot be made, contact an authorized Distributor.
2. Do not wear jewelry or loose fitting clothing when adjusting or repairing any equipment.

⚠CAUTION *Be careful to prevent entrapment of the hands and fingers between moving and fixed components of the machine.*

3. Inspect the equipment on a regular basis. Establish a maintenance schedule and keep detailed records.
   - Keep the mower clean and moving parts properly adjusted and lubricated.
   - Replace worn or damaged parts before operating the machine.
   - Keep shields in place and all hardware securely fastened.
   - Keep tires properly inflated.
4. Wash the unit after each use. Do not wash any portion of the equipment while it is hot. Do not spray water directly at bearing housings and seals. Do not use high pressure spray or steam.
5. Repair damaged metal surfaces.

Use the illustrations in the Parts Catalog as reference for the disassembly and reassembly of components.

4.1 REMOVING CUTTING UNIT FROM TRACTOR

1. Lower implement to the ground, engage parking brake, disengage all drives, stop engine and remove the ignition key

   ⚠WARNING *NEVER open or loosen hydraulic lines under pressure.*

   Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin. If fluid is injected into the skin it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

2. Allow sufficient time for hydraulic components to cool.
3. Disconnect push arms, springs and chain from cutting unit.
4. Disconnect hydraulic hoses from fittings on motor and remove case drain extension and hose clamps. Disconnect tractor hoses on attachment. Plug or cap all open hydraulic connections to prevent contamination.
5. Store push arms with attachment.

4.2 CUTTING HEIGHT

Cutting height for vertical mowers can be adjusted between 0-4 in. (0-102 mm).

Actual cutting height may vary somewhat from the heights given depending on turf conditions and other factors.

NOTE: When cutting undulating areas, lower cutting heights may cause scalping. Adjust height accordingly to prevent turf damage.

Tire pressure

Maintain air pressure in caster wheels at 22-24 psi (152-165 kPa) to improve accuracy of cutting height. Check air pressure in caster tires, while tires are cool. Keep inflation pressures on both tires the same to ensure a level cut.

Preparation

Park the tractor on a flat, level surface. Raise the cutting unit until the caster wheels are 3-4 in. (75-100mm) off the ground. Stop engine and remove key from ignition. Place blocks under cutting unit so it is supported on all sides.

It is not necessary to remove cutting unit from tractor when making height adjustments.

⚠WARNING *To prevent serious injury, lower deck until it is resting completely on the supports. This will prevent it from accidentally lowering while making adjustments. Disengage all drives, engage parking brake, stop engine and remove ignition key.*

Flail Mower Adjustment

Vertical mowers can be adjusted two different ways depending on turf conditions and type of cut desired.

For normal operation, adjust both the push arm and rear roller, along with the caster wheels - top portion of chart. This allows the height of cut to be adjusted between 0-4 in. (0-100 mm) and lifts the rear roller slightly off ground during operation. This reduces wear to the rear roller and provides anti-scalping control.

To improve anti-scalping control or create striping effects, remove adjusting pin from push arm and adjust height using only rear roller and caster wheel - bottom portion of chart. This adjustment allows the rear roller to ride over the ground surface and limits height of cut from 0 to 2-1/2 in.(0-63 mm).

NOTE: With the rear roller adjusted down, roller bearing life is reduced.

1. The chart shows the height adjustment decal used on the flail. Determine the type of adjustment desired, select cutting height and follow across chart to make appropriate adjustments.

Metric equivalents are given for reference and are not listed on decal attached to mower.

Column 1 - Height of cut
Column 2 - Push arm adjustment
Column 3 - Rear roller adjustment
Column 4 - Arrangement of spacers

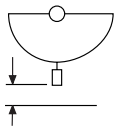
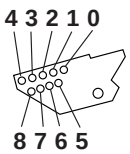
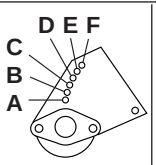
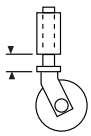
When cutting at 1 in., (25 mm) and below, assemble the lift chain to the upper hole in bracket on cutting unit.

Example: *2 in. (50 mm) height of cut - rear roller slightly raised*

1 Locate height of cut on chart.
2 Position push arm adjustment pin in hole 4.
3 Adjust rear roller in hole (A).
4 Place four spacers on bottom of spindle as shown. Store remaining spacers and washers on top.

Example: *1 in. (15 mm) height of cut - rear roller on ground*

1 Locate height of cut on chart.
2 Position push arm adjustment pin in hole 4.
3 Adjust rear roller in hole (A).
4 Place four spacers on bottom of spindle as shown. Store remaining spacers and washers on top.

1	2	3	4
 in. (mm)			
0.0 (0)	0	A	0
0.5 (13)	1	A	1
1.0 (25)	2	A	2
1.5 (38)	3	A	3
2.0 (51)	4	A	4
2.5 (64)	5	D	5
3.0 (76)	6	D	6
3.5 (87)	7	F	7
4.0 (102)	8	F	8
0.0 (0)		A	0
0.5 (13)		B	1
1.0 (25)		C	2
1.5 (38)		D	3
2.0 (51)		E	4
2.5 (64)		F	5

5.0 TIRES

1. It is important to keep the same inflation pressure on both tires to maintain the mower level and prevent uneven cutting.
2. Check the pressure once a month while the tires are cool. Use an accurate, low pressure tire gauge.

   Caster 22 to 24 psi (152 to 165 kPa)

3. Keep tires properly inflated to prolong tire life

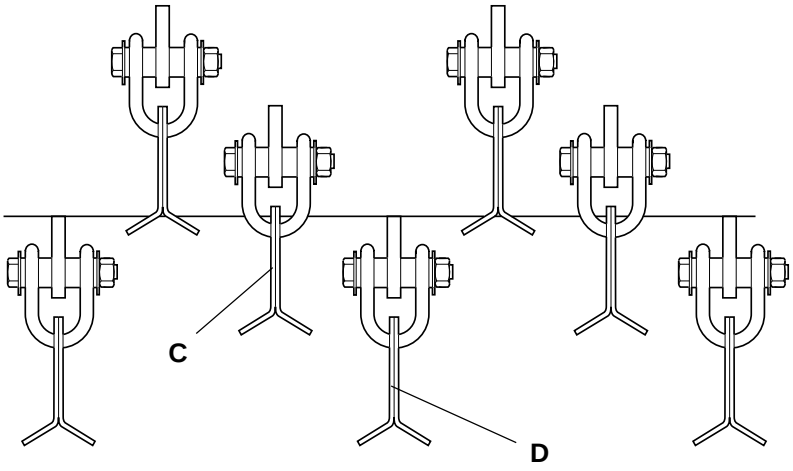
⚠CAUTION *Unless you have the proper training, tools, and experience, Do Not attempt to mount a tire on a rim. Improper mounting can produce an explosion, which may result in serious injury.*

5.1 FLAIL BLADE INSPECTION

Every 50 hours or whenever mower is removed from tractor, carefully examine the shackles **(C)** and blades **(D)** to be sure they are in good operating condition.

⚠CAUTION Operating the mower with missing or damaged parts can cause severe vibration and damage to other components.

1. Remove any debris that is wound around the rotor.
2. If only one edge of a double edged blade is worn, remove blades **(D)**, turn them 180° and reassemble to rotor with the good cutting edge facing forward.
3. If all the blades are worn on one side only, the entire rotor can be removed and turned 180°.
   - Remove belt cover, drive belt and rotor pulley.
   - Remove bumper guard, remove skid shoes and rotor bearing mounting bolts from both sides of housing.
   - Slide rotor out of housing (bearings do not have to be removed) turn rotor 180° and slide rotor back into housing.
4. Carefully reassemble rotor and all components. Rotor must be centered within the housing. Grease fittings on both rotor bearings face top of housing.



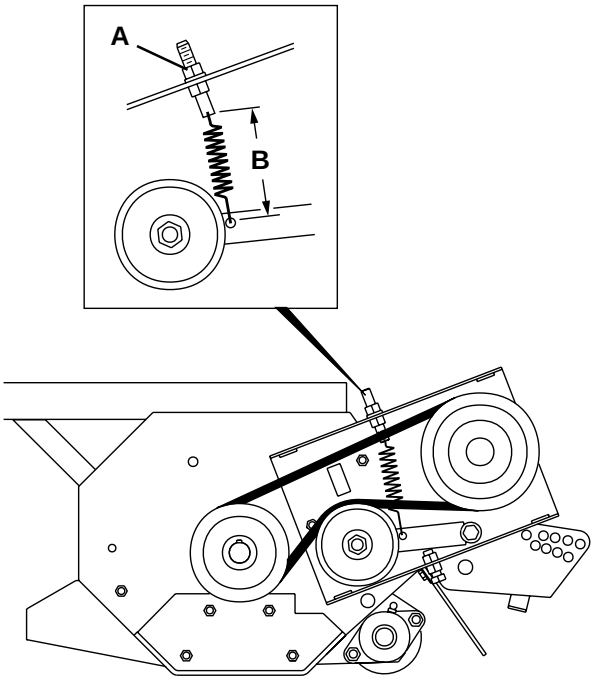
5.2 DRIVE BELT

Keep belt and pulleys clean. Belt is self adjusting. Inspect belt periodically and replace if it appears worn or frayed.

1. To replace belt, remove belt cover, then loosen hex nuts **(A)** to relieve belt tension. Install new belt as shown.
2. Adjust spring to dimensions shown below to set correct belt tension.

   B 4 ± 1/16 in. (102 ± 1.6 mm)

3. Install belt cover after adjustment.



5.3 HYDRAULIC HOSES

⚠ WARNING *To prevent serious injury from hot, high pressure oil, never use your hands to check for oil leaks, use paper or cardboard.*

Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin. If fluid is injected into the skin it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

1. Inspect hoses and tubes daily. Look for wet hoses or oil spots and replace worn or damaged hoses and tubes before operating the machine.
2. Keep the hose from twisting. Twisted hoses can cause couplers to loosen as the hose flexes during operation resulting in oil leaks.
3. Refer to the tractor's manual for additional information.

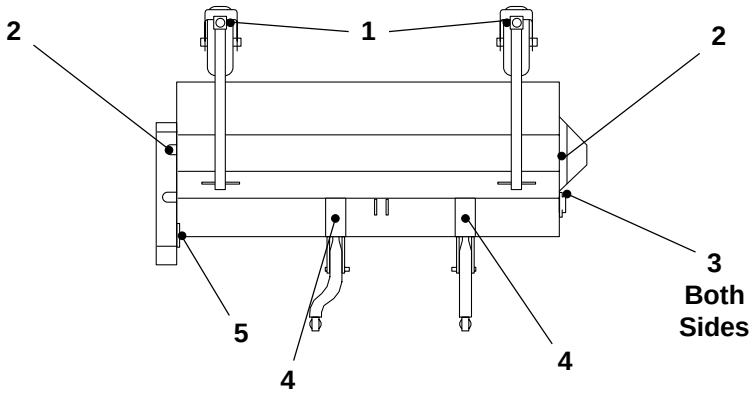
5.4 LUBRICATION

Lubricate grease fittings every 50 hours of operation or more frequently when operating in extremely dusty conditions.

1. Always clean grease fittings before and after lubricating.
2. Lubricate with grease that meets or exceeds NLGI Grade 2 specifications.
3. Apply grease with a manual grease gun and fill slowly until grease begins to seep out or pressure is felt. Never use compressed air guns.

Flail Mowers
(1) Caster Spindles
(2) Rotor Bearings
(3) Roller Bearings
(4) Push Arm Pivots
(5) Motor Spine Adaptor

4. Remove motor and lubricate motor adapter spline **(5)** using NLGI Grade 2, every 100 hours of operation.
5. For smooth operation of other pivot and friction points, apply several drops of SAE 30 wt. oil every 50 hours or as required.



5.5 STORAGE & SPECIFICATIONS

Lubricate all the fittings, then wash the mower.

Repair and paint damaged or exposed metal with touch-up paint.

Tighten all hardware, replace worn or damaged components. Loosen belt tension.

Resharpen and balance the cutter blades. Apply a light coat of rust preventive oil on sharpened edges.

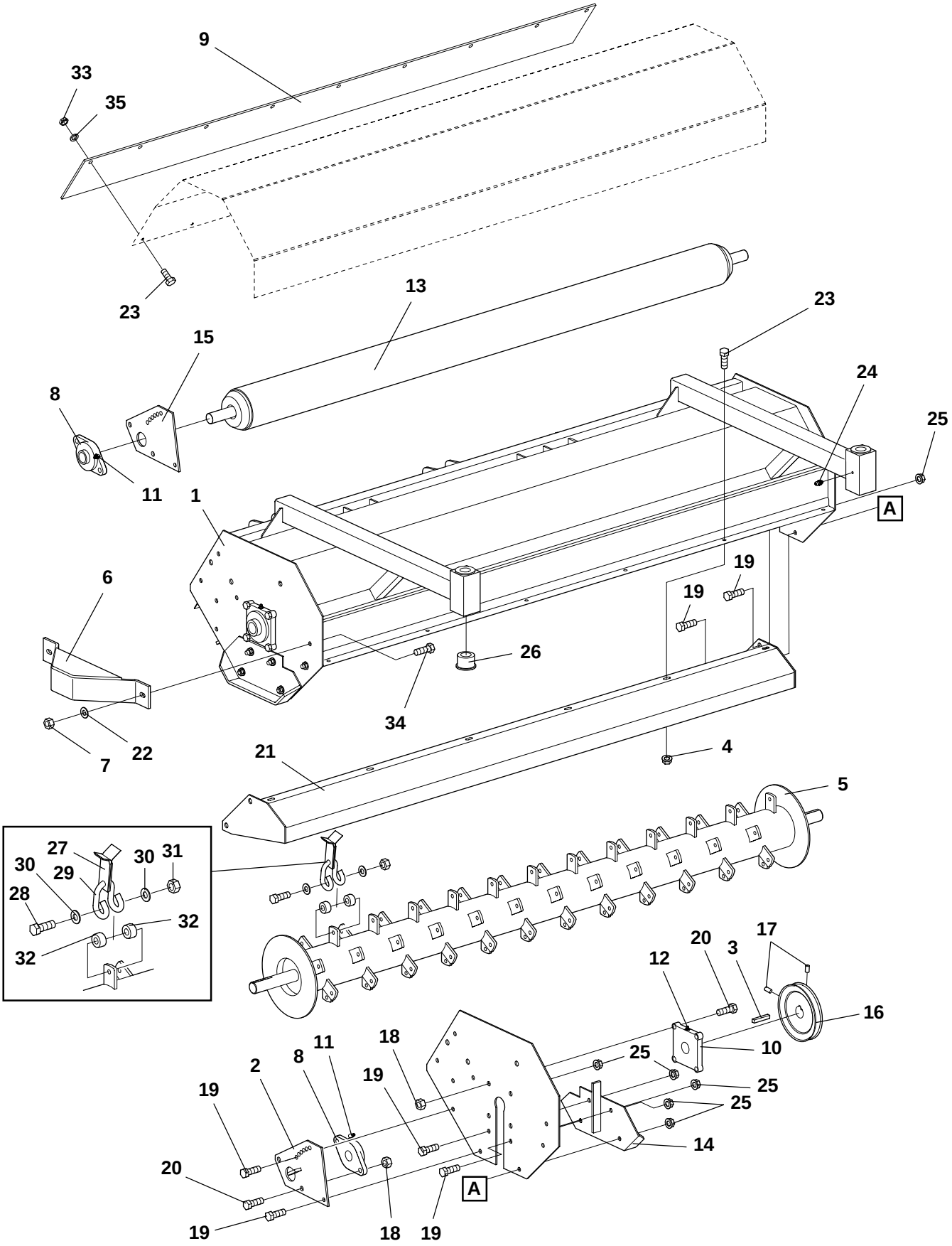
Clean the tires thoroughly and store the mower so that the load is off the tires. If the mower is not on jack-stands, check the tire pressure at regular intervals and reinflate as necessary.

Keep the machine and all its accessories clean, dry and protected from the elements during storage.

FLAIL MOWER	
MODEL NUMBER	**956021, 956025**
WIDTH OF CUT	60 " (153 mm)
SHIPPING WEIGHT	366 lbs (166 kg)
ADJUSTABLE CUTTING HEIGHT	0-4 " (0-102 mm)
TIRE PRESSURE	22-24 psi (152-165 kPa)
DRIVE	GEAR TYPE HYDRAULIC MOTOR

PARTS SECTION

FIGURE 1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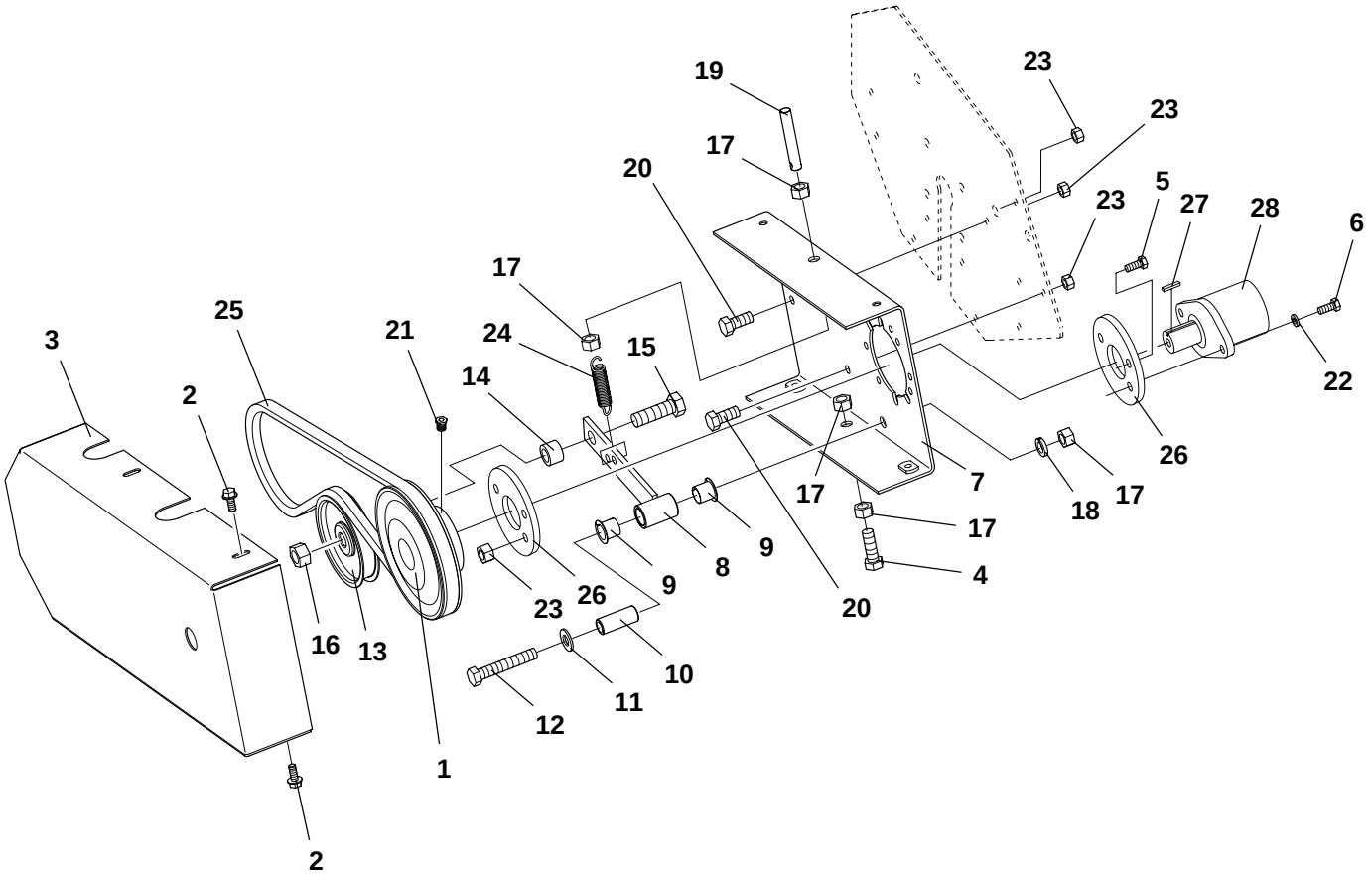
ITEM	PART NO.	QTY.	DESCRIPTION	SERIAL NUMBER/NOTES
1	2720427	1	S-FLAIL HOUSING W/DECALS	
2	162887.7	1	ROLLER PLATE ASSEMBLY LH	
3	362320	1	KEY-PARALLEL	
4	64141-6	6	NUT-WLF 5/16-18	
5	1001340	1	ROTOR ASSEMBLY	INCLUDES ROTOR & ITEMS 27-32
6	1000414.7	1	BUMPER GUARD ASSEMBLY	
7	64229-03	2	NUT-NYLOCK 3/8-16	
8	3007486	2	BEARING HOUSING	
9	3002685	1	REAR FLAP	
10	362229	2	BEARING -ROTOR	
11	35027N	2	ZERK FITTING	
12	471219	2	FITTING-GREASE 1/8 PTF	
13	162881	1	ROLLER ASSEMBLY	
14	131407.7	2	SKID ASSEMBLY	
15	162888.7	1	ROLLER PLATE ASSEMBLY RH	
16	162932	1	PULLEY	
17	438009	2	SET SCREW	
18	64229-04	12	NUT-NYLOCK 7/16-14	
19	400260	12	SCREW-3/8-16 X 7/8 HEX HEAD	
20	400336	12	SCREW-7/16-14 X 1-1/4 HEX HEAD	
21	131406.7	1	SHIELD ASSEMBLY	
22	64163-31	2	WASHER-25/64 X 1 X 12 GA	
23	64123-54	15	BOLT-HEX 5/16-18 X 3/4	
24	85010N	2	ZERK 1/4-28 SELF THREAD	
25	64141-4	12	NUT-WLF 3/8-16	
26	48053-07	4	BUSHING	
	5001085		BLADE KIT	INCLUDES ITEMS 27-32
27	3002833	144	BLADE	
28	400234	72	SCREW-5/16-24 X 2 HEX HEAD	
29	362226	72	SHACKLE	
30	64163-43	144	FLAT WASHER-5/16	
31	64151-24	72	NUT-CENTERLOCK 5/16-24	
32	365769	144	SPACER	
33	64229-02	9	NUT-NYLOCK 5/16-18	
34	64123-16	2	BOLT-HEX 3/8-16 X 1-1/4	
35	64163-29	9	21/64 X 1 X 11GA	

FIGURE 2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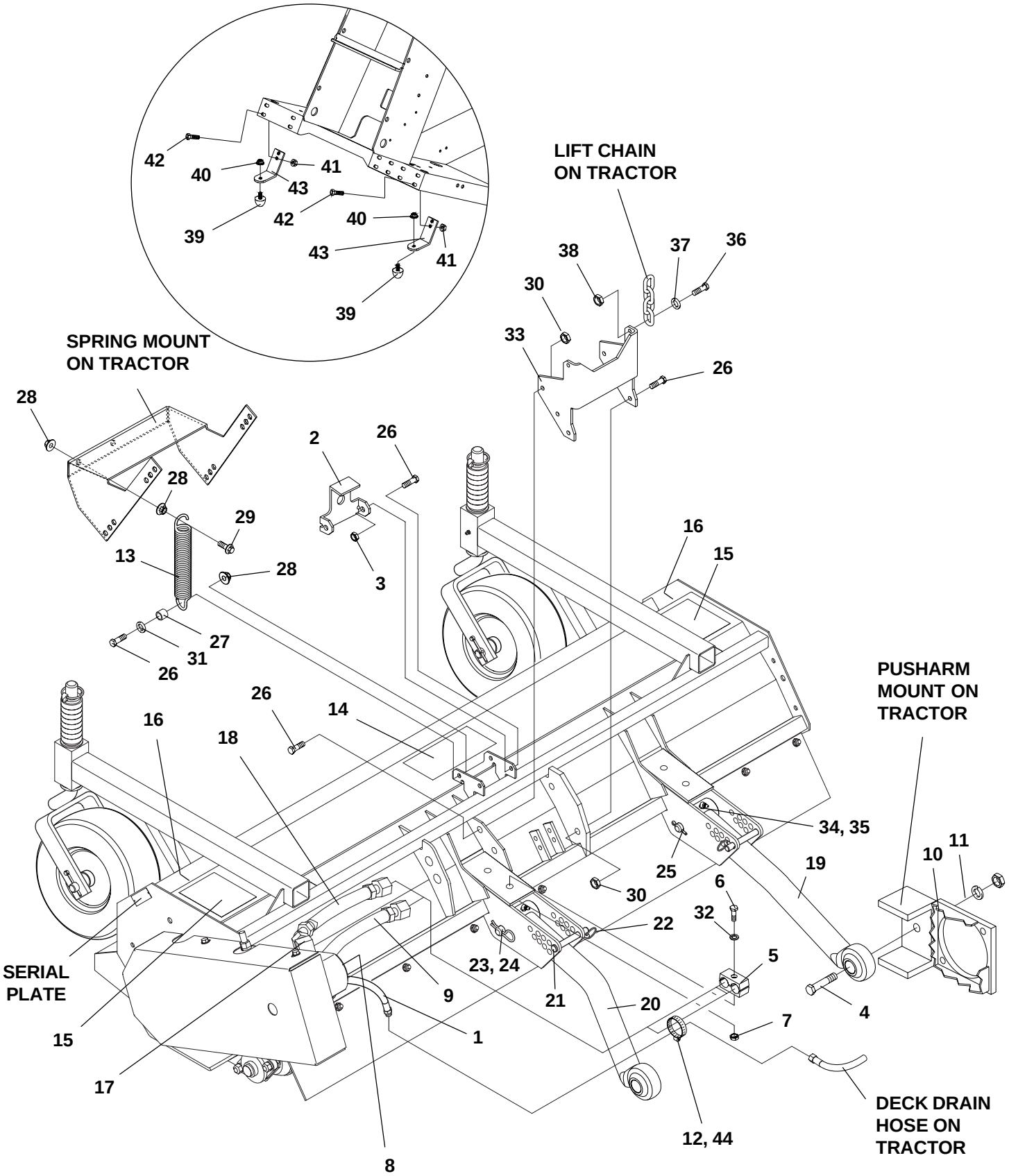
ITEM	PART NO.	QTY.	DESCRIPTION	SERIAL NUMBER/NOTES
1	2198229	1	PULLEY-6.50 NOM DIA	
2	64139-08	4	BOLT-WLF 5/16-18 X 3/4	
3	390469.7	1	COVER-BELT	
4	64123-117	1	BOLT-HEX 1/2-13 X 1-1/2	
5	64123-50	1	BOLT-HEX 3/8-16 X 1	
6	64123-87	2	BOLT-HEX 3/8-16 X 1-3/4	
7	2721213.7	1	WELDMENT-MOTOR MOUNT	
8	162882.7	1	IDLER ARM ASSEMBLY	
9	2228047	2	BUSHING-NYLINER	
10	362244	1	SPACER-IDLER	
11	64163-19	1	WASHER-33/64 X 1-1/4 X 12GA	
12	64123-31	1	BOLT-HEX 1/2-13 X 3	
13	2238008	1	IDLER PULLEY	
14	362245	1	SPACER-IDLER PULLEY	
15	400616	1	NUT-HEX LOCK 5/8-11	
16	64151-6	1	NUT-NYLOCK 5/8-11	
17	64025-19	5	NUT-HEX 1/2-13	
18	64006-05	1	LOCKWASHER-HELICAL 1/2	
19	362246	1	STUD-SPRING ADJUSTABLE	
20	400260	3	BOLT-HEX 3/8-16 X 7/8	
21	64044-2	2	SCREW-SET 5/16-18 X 3/8	
22	64163-31	2	WASHER	
23	64229-03	6	NUT-HEX 3/8-16	
24	362228	1	SPRING-EXTENSION	
25	338548	1	BELT-DRIVE	
26	2720915.7	2	PLATE-MOTOR SUPPORT	
27	64164-27	1	KEY-1/4 X 1/4 X 1	
28	2218152-03	1	MOTOR-16CC	USE ON 956021
	2218152-05	1	MOTOR-20CC	USE ON 956025
	00459	1	LABEL-PRESSURE	LOCATED ON MOTOR
	00460	1	LABEL-RETURN	LOCATED ON MOTOR

FIGURE 3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LIFT CHAIN ON TRACTOR
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SPRING MOUNT ON TRACTOR
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PUSHARM MOUNT ON TRACTOR
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SERIAL PLATE
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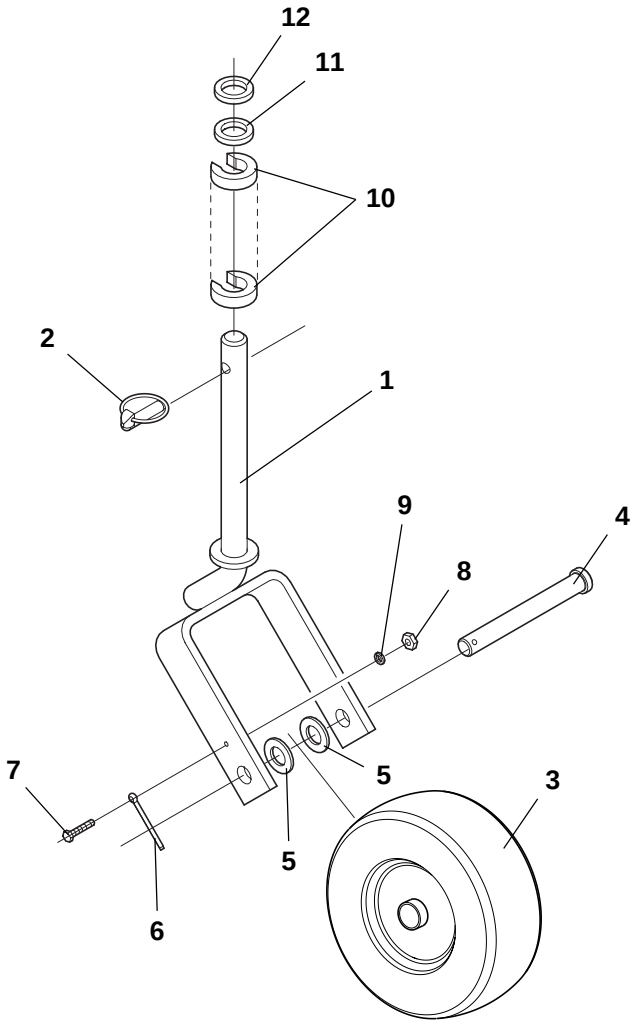
DECK DRAIN HOSE ON TRACTOR

ITEM	PART NO.	QTY.	DESCRIPTION	SERIAL NUMBER/NOTES
1	2692286-02	1	HOSE-3/8 ORS/ORS MALE X 19.00	
2	2192390	1	DECK-HOOK	
3	64151-2	2	3/8-16 HH LOCK NUT	
4	64123-133	2	BOLT-HEX 5/8-18 X 3	
5	2208139	1	CLAMP-TUBE	
6	64123-12	1	BOLT-HEX 5/16-18X2-1/2	
7	64229-02	1	NUT-NYLOCK 5/16-18	
8	158006-10	1	FITTING-ORB/ORS	
9	2692238-05	1	HOSE-5/8 ORS/ORS X 45.87	
10	64006-04	2	LOCKWASHER 5/8	
11	64025-16	2	NUT-HEX 5/8-18	
12	65362-01	1	RUBBER-CLAMP 4IN	
13	2198162	2	SPRING-EXTENSION	
14	2000677	1	DECAL-DANGER	
15	2721589	2	DECAL-FLAIL HEIGHT OF CUT	
16	75075A	2	DECAL-CPSC WARNING	
17	158007-05	2	FITTING-90 ORS/ORB	
18	2692238-06	1	HOSE-5/8 ORS/ORS X 48.75	
19	2721218	1	ASSEMBLY-PUSHARM RH	INCLUDES ITEMS 34 & 35
20	2721219	1	ASSEMBLY-PUSHARM LH	INCLUDES ITEMS 34 & 35
21	3000439	2	PIN-CLEVIS 1/2" X 3-3/4"	
22	64173-02	2	PIN-SNAP RING	
23	363215	2	SHAFT-CLEVIS	
24	460316	2	HAIRPIN-COTTER	
25	460050	2	COTTER PIN 3/16" X 1-1/4"	
26	64123-50	8	BOLT-HEX 3/8-16 X 1"	
27	23009A	2	SPACER	
28	64141-4	6	NUT-WLF 3/8-16	
29	64123-70	2	BOLT-HEX 3/8-16 X 1-1/2	
30	64229-03	4	NUT-NYLOCK 3/8-16	
31	64163-53	2	WASHER-0.391 X 1.50 X 9 GA	
32	64251-003	1	WASHER-M8	
33	2720791.7	1	PLATE-LIFT SUPPORT	
34	108102	2	ZERK	
35	343539	4	BUSHING	
36	64123-47	2	BOLT-HEX 5/16-18 X 1-1/4	
37	64163-46	2	WASHER-0.383/0.393X0.88 X 7GA	
38	64151-1	2	NUT-CENTERLOCK 5/16-18	
39	523126	2	BUMPER-RUBBER	
40	64141-6	2	NUT-WLF 5/16-18	
41	64229-02	4	NUT-NYLOCK 5/16-18	
42	64123-68	4	BOLT-HEX 5/16-18 X 1	
43	2721174.7	2	BRKT-UPSTOP, FLAIL	
44	108094-01	1	CLAMP-HOSE SAE20	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CASTER ASSEMBLY

FIGURE 4

ITEM	PART NO.	QTY.	DESCRIPTION	SERIAL NUMBER/NOTES
1	131596.7	2	CASTER WHEEL SPINDLE ASSEMBLY	
2	64173-04	2	PIN-KLIK TYPE	
3	1003769	2	WHEEL AND TIRE ASSEMBLY	
4	3003207	2	SHAFT-CASTER WHEEL	
5	64163-57	4	WASHER-2.00 X 0.766 X 9 GA	
6	460056	2	COTTER PIN 3/16" X 2"	
7	403578	2	SCREW-#10-24 X 1" HEX HEAD	
8	444310	2	NUT-#10-24 HEX	
9	446118	2	LOCKWASHER-#10	
10	PJH1054	16	SPACER	
11	64163-07	2	SPACER	
12	64163-25	2	WASHER 1-1/32 X 2 X 11GA	

PART NO.	DESCRIPTION	FIG/ITEM
00459	LABEL-PRESSURE	2 /28
00460	LABEL-RETURN	2 /28
1000414.7	BUMPER GUARD ASSEMBLY	1 /6
1001340	ROTOR ASSY	1 /5
1003769	WHEEL/TIRE 11X4X5	4 /3
108094-01	CLAMP-HOSE SAE20	3 /44
108102	LUB,FITTING,65 DEG	3 /34
131406.7	SHIELD ASY	1 /21
131407.7	SKID ASY	1 /14
131596.7	SPINDLE	4 /1
158006-10	FITTING-ORB/ORS	3 /8
158007-05	FITTING-90 ORS/ORB	3 /17
162881	ROLLER ASY	1 /13
162887.7	ROLLER PLT	1 /2
162888.7	RLR PLT AS	1 /15
162932	PULLEY	1 /16
2000677	LABEL-DANGER/WARNING	3 /14
2192390	DECK HOOK	3 /2
2198162	SPRING-EXTENSION	3 /13
2208139	CLAMP-TUBE	3 /5
2218152-03	MOTOR-16CC	2 /28
2218152-05	MOTOR-20CC	2 /28
23009A	SPACER,ENGINE MOUNT	3 /27
2692238-05	HOSE-5/8 ORS/ORS X 45.87	3 /9
2692238-06	HOSE-5/8 ORS/ORS X 48.75	3 /18
2692286-02	HSE-3/8 ORS/ORS MALEX19.0	3 /1
2720427	S FLAIL HOUSING W/DECALS	1 /1
2720791.7	PLATE-LIFT SUPPORT	3 /33
2721174.7	BRKT-UPSTOP, FLAIL	3 /43
2721218	S WLDMT-PUSHARM RH	3 /19
2721219	S WLDMT-PUSHARM LH	3 /20
2721589	LABEL-FLAIL HEIGHT OF CUT	3 /15
3000439	PIN, CLEVIS	3 /21
3002685	FLAP, REAR	1 /9
3002833	BLADE,FLAIL	1 /27
3003207	SHAFT, CASTER WHEEL	4 /4
3007486	HOUSING, BEARING	1 /8
343539	BUSHING	3 /35
35027N	ZERK FITTING	1 /11
362226	SHACKLE	1 /29
362229	BEARING	1 /10
362320	KEY, PARALLEL	1 /3
363215	REAR SHAFT	3 /23
365769	SPACER-FLAIL	1 /32
400234	BLT-HEX 5/16-24X2	1 /28
400260	SCREW 3/8-16 X 7/8 HEX	1 /19
400336	SCREW 7/16-14 X 1-1/4 HEX	1 /20
403578	SCREW 10-24 X 1 HEX	4 /7
438009	SCREW-SET	1 /17
444310	NUT-HEX #10-24	4 /8
446118	LOCKWASHER-#10	4 /9
460050	COTTER PIN	3 /25
460056	COTTER PIN 3/16 X 2	4 /6
460316	PIN COTTER, INTERNAL HAIR	3 /24
471219	FITTING-STR.-STEW.WARNER	1 /12
48053-07	BEARING-FLANGED BRONZE	1 /26
523126	BUMPER-RUBBER	3 /39
64006-04	LOCKWSHR-HELICAL 5/8	3 /10
64025-16	NUT-HEX 5/8-18	3 /11
64123-12	BLT-HEX 5/16-18X2-1/2	3 /6
64123-133	BLT-HEX 5/8-18X3	3 /4
64123-16	BLT-HEX 3/8-16X1-1/4	1 /34
64123-47	BLT-HEX 5/16-18X1-1/4	3 /36
64123-50	BLT-HEX 3/8-16X1	2 /5
64123-50	BLT-HEX 3/8-16X1	3 /26
64123-54	BLT-HEX 5/16-18X3/4	1 /23
64123-68	BLT-HEX 5/16-18X1	3 /42
64123-70	BLT-HEX 3/8-16X1-1/2	3 /29
64141-4	NUT-WLF 3/8-16	1 /25
64141-4	NUT-WLF 3/8-16	3 /28
64141-6	NUT-WLF 5/16-18	1 /4
64141-6	NUT-WLF 5/16-18	3 /40
64151-1	5/16-18 HEX LOCK NUT	3 /38
64151-2	3/8-16 HH LOCK NUT	3 /3
64151-24	HEX CL NUT 5/16-24	1 /31
64163-07	1-1/32X1-3/4X1/4 WASH	4 /11
64163-25	1-1/32X2X11GA WASHER	4 /12
64163-29	21/64X1X11GA.WASHER	1 /35
64163-31	WASH.25/64X1X12 GA	1 /22
64163-43	WSHR.443/.454X1X11GA	1 /30
64163-46	WSHR.383/.393X.88X7GA	3 /37
64163-53	WASHER .391X1.50X9GA	3 /31
64163-57	WSHR 2.00X.766X9GA	4 /5
64173-02	PIN, SNAP RING	3 /22
64173-04	QUICK PIN	4 /2
64229-02	LOCK NUT-NYLON 5/16-18	1 /33
64229-02	LOCK NUT-NYLON 5/16-18	3 /41
64229-02	LOCK NUT-NYLON 5/16-18	3 /7
64229-03	LOCK NUT-NYLON 3/8-16	1 /7
64229-03	LOCK NUT-NYLON 3/8-16	3 /30
64229-04	S LCK NUT-NYLN 7/16-14	1 /18
64251-003	WHSR-M8	3 /32
65362-01	RUBBER-CLAMP 4IN	3 /12
75075A	LABEL, CPSC DANGER	3 /16
85010N	ZERK, 1/4-28 STR SELF THRD	1 /24
PJH1054	SPACER, CASTER (BUNTON)	4 /10

TEXTRON WARRANTY

Textron Turf Care And Specialty Products warrants for one year each new product and accessory, according to the following terms.

This warranty extends to the original retail purchaser only and commences on the date of original retail purchase. Accordingly this warranty is not transferable to any subsequent purchasers.

Any part of the product or accessory manufactured by Textron Turf Care And Specialty Products and found in the reasonable judgement of Textron Turf Care And Specialty Products to be defective in material or workmanship will be repaired or replaced by an authorized dealer without charge for parts and labor.

The product or accessory including any defective part must be returned to an authorized dealer within the warranty period. The expense of returning the product or accessory to an authorized dealer for warranty service and the expense of returning it back to the owner after repair or replacement will be paid for by the owner. Textron Turf Care And Specialty Products' responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any product or accessory.

Proof of purchase will be required by the authorized dealer to substantiate any warranty claim. All warranty work must be performed by an authorized dealer.

Textron Turf Care And Specialty Products makes no warranty with respect to engines, tires, batteries, regulators, starter-generators, or other parts not of its manufacture as such parts are usually warranted separately by their respective manufacturers.

This warranty does not include service items or parts subject to normal wear.

This warranty does not cover any product or accessory that has been subject to misuse, neglect, negligence, or accident, or that has been operated or maintained in any way contrary to the operating or maintenance instructions as specified in the Operator's Manual. The warranty does not apply to any product or accessory that has been altered or modified so as to adversely affect the product's operation, performance or durability or that has been altered or modified so as to change its intended use. In addition, **the warranty does not extend to repairs made necessary by normal wear,** or by the use of parts or accessories which in the reasonable judgement of Textron Turf Care And Specialty Products are either incompatible with the product or adversely affect its operation, performance or durability.

Textron Turf Care And Specialty Products reserves the right to change or improve the design of any product or accessory without assuming any obligation to modify any product previously manufactured.

THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ALL WARRANTIES OTHER THAN THIS EXPRESS WARRANTY ARE SPECIFICALLY DISCLAIMED.

TEXTRON TURF CARE AND SPECIALTY PRODUCTS' OBLIGATION UNDER THIS WARRANTY IS STRICTLY AND EXCLUSIVELY **LIMITED TO** THE **REPAIR OR REPLACEMENT** OF DEFECTIVE PARTS, AND TEXTRON TURF CARE AND SPECIALTY PRODUCTS DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR IT ANY OTHER OBLIGATION.

TEXTRON TURF CARE AND SPECIALTY PRODUCTS ASSUMES NO RESPONSIBILITY FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, EXPENSE FOR GASOLINE, EXPENSE OF RETURNING THE PRODUCT TO AN AUTHORIZED DEALER AND EXPENSE OF RETURNING IT BACK TO THE OWNER. MECHANIC'S TRAVEL TIME, TELEPHONE OR TELEGRAM CHARGES, TRAILERING OR TOWING CHARGES, RENTAL OF A LIKE PRODUCT WHILE WARRANTY SERVICE IS BEING PERFORMED, TRAVEL, LODGING, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, LOSS OF USE OF PRODUCT, LOSS OF TIME OR INCONVENIENCE.

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

Textron Turf Care And Specialty Products * P.O. Box 82409 * Lincoln, Nebraska 68501-2409

To make a claim under warranty, contact an authorized dealer immediately upon realizing a problem exists. We recommend having the warranty work performed by the dealer who originally sold you the unit; however, warranty work can be sought from any authorized dealer. Remember, your unit must be delivered to an authorized dealer within the warranty period, and all warranty work must be performed only by an authorized dealer. Proof of purchase will be required by the dealer to substantiate any warranty claim.

EXAMPLES OF ITEMS NOT COVERED UNDER WARRANTY

Provisions of the warranty will not apply to:

- Normal service requirements arising during the warranty period, such as carburetor or ignition adjustment and cleaning or wear of a drive belt, brake, clutch linings or starter brushes.
- Normal service work over and above the repair and replacement of defective parts.
- Units subject to misuse, neglect, negligence, or accident.
- Units that have been altered or modified so as to adversely affect their operation, performance or durability or to change their intended use.
- Repairs made necessary by the use of parts or accessories which are either incompatible with the unit or adversely affects the operation, performance or durability.
- Units not operated or maintained in accordance with the instructions in the Operator's Manual.
- Normal cleaning, adjusting or replacing of such items as filter, spark plugs, ignition points, light bulbs, fuses or starter drive.
- Periodic checking or adding of lubricants to the unit or service check-up, tune-up or diagnosis.

Expense of delivering the unit to the dealer and expense of returning the unit back to the owner, mechanic's travel time, trailering or towing charges, or rental of a like unit during the time warranty repairs are being performed.

Engines, tires, batteries, regulators and starter-generators manufactured by other than Textron Turf Care And Specialty Products are not covered under this warranty as such parts are usually warranted by their respective manufacturers.
This warranty applies only to the original retail purchaser. Second-owner or subsequently owned units are not covered under warranty.

OWNER'S OBLIGATION AND RESPONSIBILITY

Normal maintenance service and replacement of service items are the responsibility of the owner and as such are not considered defects in material or workmanship within the terms of the warranty. Individual operating habits and usage contribute to the need for maintenance service.

See your authorized dealer for proper maintenance and care of your unit. Proper maintenance and care will assist in keeping your overall operating cost at a minimum.

To validate a warranty claim, it is the owner's responsibility to maintain all components in proper adjustment and service the unit as specified in the Operator's Manual. It is the owner's responsibility to provide proper lubrication for all components and provide correct recommended fuel for the unit. It is the owner's responsibility to maintain the battery liquid level and charge as specified, as well as maintaining the correct pressure in the unit's tires.

World Class Quality, Performance And Support

Equipment from Textron Turf Care And Specialty Products is built to exacting standards ensured by ISO 9001 registration at all our manufacturing locations. A worldwide dealer network and factory-trained technicians backed by Textron Parts Xpress provide reliable, high-quality product support.

TURF CARE AND ISO TEXTRON 9001 SPECIALTY PRODUCTS

TEXTRON
TURF CARE AND SPECIALTY PRODUCTS

BOB-CAT BUNTON CUSHMAN JACOBSEN RANSOMES RYAN

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